

had to do with a poisoning case caused by *C. Botulinum* by food. The case was treated with botulinum anatoxin type B.

**Conclusion:** This case shows that there are still rare diseases that may occur and which might be without specific clinical and biochemical signs, without anamnesis data, so we should be attentive to diagnose these cases and reanimate in order to minimize death cases.

**PP-041 Efficacy of chloramphenicol combinatied with erythromycin in treatment of 21 pneumonia patients infected with multi-drug resistant *Pseudomonas aeruginosa***

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**Background:** Following antibiotics being used in hospitals generally, pneumonia patients infected with multi-drug resistant *P. aeruginosa* can not be ignored. The aim of this research was to observe the efficacy of chloramphenicol combined with erythromycin in treatment of pneumonia infected with multi-drug resistant *P. aeruginosa*.

**Methods:** A retrospective clinical study on 21 patients with pneumonia infected with multi-drug resistant *P. aeruginosa* was carried out from January 2007 to December 2010. Clinical features, drug-resistant features and results of susceptibility test were analysed.

**Result:** All of the 21 patients were resistant to the third generation cephalosporin and carbostyryl. Treated with imipenem and sodium cilastatin, mesomerism observed in 16 patients, and drug resistance appeared in five patients. Then, switched to treating with chloramphenicol combined with erythromycin, 12 patients cured, five patients improved, inefficacy appeared in four patients. Totally, ratio of patients improved was 23.8 percent while which of patients cured was 57.4 percent. 80.94 percent of all the drug-resistant patients were improved.

**Conclusion:** Incidence rate of pneumonia associated with *P. aeruginosa* is always higher than that resulting from other etiological agents. Diagnosed in time and treated with suitable antibiotic are profited to cure and prevention of hospital acquired pneumonia resulting from *P. aeruginosa*.

**PP-042 A case with erysipelas caused by beta hemolytic *Streptococcus*, as a cause of sepsis state**

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Erysipelas is an acute infection, used by Group A beta hemolytic *Streptococcus*. It is characterized by inflammatory plaque well limited by surrounded tissues that affect the face and the trunk.

In order to develop erysipelas it must be a focus with small invisible fissures under the skin, from streptococcal infection of the wounds, chirurgical incision or in areas with dermatophytosis.

To develop streptococcal septicemia it must be a septic focus in the organism, from which microbes occasionally jump in circulation.

Streptococcal infections may assume the character of septicemia at the presence of favorable conditions such as the lower of organism's resistance because of malnutrition, fatigue, serious diseases convalescence.

**Presentation case:** Patient N.B, 70 years, appeared at the infective disease clinic with the diagnose: *Erysipelas cruris sin.*

The patient presented: temp 40 degrees, PA 70/40 mm Hg, tachycardia 90', accentuated redness and edema of the left crural region.

The main examinations were taken and the treatment started with Tazocina 4.5×4 fl i.v, amikacin 500mg×2 i.v, solution, NaHCO<sub>3</sub>, K and vasoconstrictor like dopamine. Examinations: Erythrocytes 3,700,000, Leukocytes 13,000, Azotemia 180mg%, Creatinine 4.3mg%, Glucose 87mg%, the patient had anuria in spite of the presence of the catheter. From the microbiological examination it resulted *Beta hemolytic Streptococcal*. Patient has acrocyanosis signs at the toes, cellulite, predisposed by hypotension and CID.

**Discussion:** Streptococcal infections may assume the character of septicemia at the presence of favorable conditions such as the lower of organism's resistance.

**Conclusions:** Streptococcal diseases remain one of the most problematic morbidity for the organism. The importance of the problem solution is: early diagnosis, adequate and efficient treatment, preventing systemic multi-organ complications.

**PP-043 *Staphylococcus epidermidis* contains ampicillin resistant gene**

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**Background and Objective:** *Staphylococcus epidermidis* is coagulase negative, gram positive cocci that reside naturally on human skin. *Staphylococcus epidermidis* has emerged as a major nosocomial pathogen. The main objective of the study was to determine whether *Staphylococcus epidermidis* contains any antibiotic resistance gene. Also to ascertain the size of the plasmid of clinical isolates of *Staphylococcus epidermidis* collected locally and to find out the restriction sites present in the plasmid.

**Methods:** Conventional Strains of *Staphylococcus epidermidis* were collected from Pakistan Institute of Medical Sceinces (PIMS), Islamabad, Pakistan and identified by using different biochemical tests. Overnight shaking of *Staphylococcus epidermidis* colonies at 250 rpm at 37°C was done, in LB medium containing Ampicillin. Alkaline miniprep extraction protocol and Gene JETTM Plasmid Miniprep kit (Fermentas) protocol were used to isolate plasmid DNA. The isolated plasmid was checked for restriction fragment by using EcoRI and Hind III restriction endonucleases.

**Results:** The clinically isolated samples of *Staphylococcus epidermidis* were negative for Indole production test and Citrate utilization test. Samples were positive for Nitrate reduction test, Starch hydrolysis test and Catalase test. After overnight shaking at 250 rpm at 37°C bacterial growth appeared in the LB medium containing Ampicillin. Alkaline miniprep extraction gave minimum yield for *Staphylococcus epidermidis*. Gene JETTM Plasmid Miniprep kit (Fermentas) gave higher yields and comparatively pure DNA. It was found that *Staphylococcus epidermidis* had plasmid of size 14kb. Restriction fragments of 10kb and 4kb were obtained when plasmid was digested with EcoRI. The plasmid remained intact when digested with Hind III. The resulted fragments were analysed on 1% agarose gel.

**Conclusion:** Clinical isolates of *Staphylococcus epidermidis* contains Ampicillin Resistant Gene.

**PP-044 Analysis of 87 septicemia cases**

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**Background:** Septicemia are commom in the infectious disease department or the emergency departments. Pathogens and primary infection maybe different among different departments. The objective of this study was to

examine the epidemiology and microbiology of bacteremia in adult patients who hospitalized in the infectious disease department of First Hospital, Jilin University.

**Methods:** A retrospective observational study involving 87 adult septicemia patients and 113 blood cultures (Oct 2010-Apr 2011) of septicemia cases was performed in the infectious disease department, and the epidemiology and microbiology were analysed.

**Results:** Among these blood cultures, 38 (33.6%) were pathogens positive. Most common pathogen was *Escherichia coli* 11 (40.7%), then *Staphylococcus* 5 (18.5%). Urinary tract infections (41.4%, 36/87) were most common in these patients. Liver abscess (10.7%, 9/87) were risk factor of septicemia too.

**Conclusions:** Gram-negative bacteria is main pathogens of septicemia in our department. Infections such as urinary tract infections, liver abscess, and so on, should be pay more attention.

#### Poster Session – Basic Science including Animal Models

##### PP-045 Pathophysiology of cryptosporidiosis in immunosuppressed Balb/c and C57bl/6 mice models

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**Background:** Cryptosporidiosis is caused by protozoan parasite *Cryptosporidium* spp. and leads to an acute/chronic gastroenteritis. The incidence rate of infection in immunosuppressed patients suffering from diarrhea was highly reported. This study was carried out to evaluate the proliferation of the parasite from different sources of Iranian species of *Cryptosporidium* spp. and to study its pathophysiology in immunosuppressed mice.

**Methods:** Mice, calves and human stools samples were collected, centrifuged by Paraseb kit, smears were prepared and stained with acid fast assay and examined microscopically. Oocysts were identified, separated and concentrated by sucrose floatation. Balb/c and C57bl/6 mice were immunosuppressed by I.P. Dexamethasone injection; immunosuppression was confirmed by lymphocyte proliferation, and isolated oocysts from different sources were orally inoculated into mice. The parasite replication was assessed daily to confirm proliferation of parasite. Among the positive samples, animals were humanely killed and the target organs (lungs, liver, intestine, spleen) were removed, stained with Hematoxyline Eosine for histopathological examination.

**Results:** The results showed more susceptibility of C57bl/6 mice rather than the Balb/c one; therefore the infection was developed faster in C57bl/6 mice. No histopathology was observed in H&E stained sections of target organs and no oocysts was detected in impression smears of both Balb/c and C57bl/6 mice. No extra-intestinal infection was detected in study groups, which may due to short period of infection in experimental animals.

**Conclusion:** These findings emphasized more susceptibility of immunosuppressed C57bl/6 than Balb/c mice to *Cryptosporidium* spp. infection. In addition, no histopathology were detected in a short period up to three weeks of experimental cryptosporidiosis, which may need longer period to allow parasite for extra-intestinal infection.

##### PP-046 The role of Fas mutation on nutritional steatohepatitis in mice

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**Objective:** Our previous study has indicated that the Fas pathway played a key role in hepatocyte apoptosis in nutritional steatohepatitis in mice. This study aimed to explore whether Fas mutation accelerated hepatic steatosis and inflammatory infiltration in nutritional steatohepatitis in mice.

**Methods:** Mice homozygous for the lymphoproliferation spontaneous mutation (C57BL/6J-Fas<sup>lpr</sup>) and wild type C57BL/6J mice were fed a methionine-choline deficient (MCD) diet for three weeks to induce non-alcoholic steatohepatitis (NASH). The role of Fas gene mutation on NASH was assessed by comparing the severity of hepatic steatosis and inflammation, mRNA and protein expression of hepatic inflammatory and fibrogenetic related factors, proliferating cell nuclear antigen (PCNA) and transforming growth factor- $\beta$ 1 (TGF $\beta$ 1).

**Results:** At weeks 3, MCD diet induced hepatic steatosis and inflammatory infiltration in both of wild type and Fas<sup>lpr</sup> mice. Especially, severe hepatic injury was observed in Fas<sup>lpr</sup> mice compared with wild type mice, which was associated with up-regulated cell proliferation factor PCNA and fibrogenetic growth factors TGF $\beta$ 1.

**Conclusions:** Fas<sup>lpr</sup> mice developed more severe hepatic injury including hepatic steatosis and inflammatory infiltration induced by MCD diet compared with wild type mice, which might associated with excessive release of cell proliferation, inflammatory and fibrogenetic factors.

##### PP-047 Effect of rosiglitazone on hepatic oxidative stress in fructose-induced fatty liver disease

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**Aim:** We characterize changes in liver pathology, hepatic lipid composition and hepatic oxidative-anti-oxidative milieu in rats given fructose enriched diet (FED) and the PPAR- $\gamma$  agonist Rosiglitazone.

**Methods:** Sprague-Dawley rats, divided into 2 groups were studied: Rats on standard chow diet and on FED for 6 weeks, but in the last 2 weeks of the study period FED-rats received Rosiglitazone (10 mg/kg/day).

**Results:** FED rats had increase in the content of hepatic triglyceride, cholesterol, malondialdehyde (MDA), glutathione reductase (GSSG-R), but decrease in phospholipids,  $\alpha$ -tocopherol, paraoxonase (PON) levels. No changes in adiponectin, TGF- $\beta$  or in TNF- $\alpha$  plasma levels. FED rats had macro and micro vesicular hepatic fat deposits and an increase in relative fibrosis area. Administration of Rosiglitazone had decrease in the hepatic triglycerides, MDA and GSSG-R levels, increase in hepatic phospholipids content, PON activity. Rosiglitazone caused an increase in adiponectin plasma and a decrease in the hepatic macro vesicular, but no change in hepatic micro vesicular and inflammatory score nor in the relative fibrosis area.

**Conclusions:** Administration of Rosiglitazone to rats with the MS, may improve hepatic lipid metabolism and the hepatic oxidative-anti oxidative milieu.